CMR/ATEX

Extremely robust, medium pressure centrifugal fans with a backward curved impeller, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor

Notified authority: LOM
Identification no.: LOM 03ATEX0147
Motor marking:
⟨Ex⟩ II 2G Ex db IIB T4 Gb
⟨Ex⟩ II 2G Ex eb IIB T3 Gb
⟨Ex⟩ II 2G Ex tb IIIC T135 ºC Db

Extremely robust medium pressure single inlet centrifugal fans. ATEX 2G or 2D certification with flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb motor to work in explosive gas or dust atmospheres.

Fan:
- Sheet steel casing.
- Backward curved impeller in highly robust sheet steel.
- Non-sparking inlet ring made of copper.
- Maximum temperature of air to be carried: -25 ºC +88 ºC (T4) or +120 ºC (T3).
- Standard marking with flameproof motor (Ex db): II 2G Ex h IIB T4 Gb.
- Standard marking with increased safety motor (Ex eb): II 2G Ex h IIB T3 Gb.
- Standard marking with motor for dust ignition proof (Ex tb): II 2D Ex h IIIC T135 ºC Db.

Motor:
- Class F motors with ball bearings, IP55 protection. ATEX certification flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -20 ºC +40 ºC.

Finish:
- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 ºC, after degreasing with phosphate-free nanotechnological treatment.

On request:
- Motors with built-in PTC.
- Special windings for different voltages and frequencies.
- ATEX construction for flammable dust.
- ATEX fan with greater protection than the standard marking.
- Stainless steel construction.

Order code

CMR/ATEX	**—**	***1650***	**—**	***2T***	**/**	***2G Ex eb***
CMR/ATEX: Extremely robust, medium pressure centrifugal fans with a backward curved impeller, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor		Impeller size		Number of motor poles 2=3000 r/min 50 Hz 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz	T = Three-phase	2G Ex eb: for zones 1 and 2 2G Ex db: for zones 1 and 2 2D Ex tb: for zones 21 and 22

Technical characteristics

Model	Speed	Maximum admissible current (A)			Installed power	Maximum flow rate	Sound pressure level[1] dB (A)	Approx. weight (Kg)	
	(r/min)	230V	400V	690V	(kW)	(m³/h)	Inlet	Ex eb	Ex db
CMR/ATEX-1240-4T	1410	3.81	2.20		0.75	5830	64	70	84
CMR/ATEX-1445-2T	2880		15.70	9.06	7.50	16560	82	141	163
CMR/ATEX-1445-4T	1435	4.54	2.61		1.10	8100	67	93	112
CMR/ATEX-1650-2T	2930		22.00	12.70	11.00	18885	84	178	258
CMR/ATEX-1650-4T	1400	6.93	4.00		1.50	10600	69	114	134
CMR/ATEX-1856-4T	1450	11.27	6.48		3.00	15240	75	152	175
CMR/ATEX-2063-4T	1455		10.64	18.50	5.50	24490	77	225	264
CMR/ATEX-2063-6T	940	7.62	4.40		1.50	16135	67	209	233
CMR/ATEX-2271-4T	1470		20.76	36.10	11.00	34760	83	315	412
CMR/ATEX-2271-6T	945	14.72	8.50		3.00	23000	74	280	320
CMR/ATEX-2380-4T	1465		42.00	24.00	22.00	48000	81	503	508
CMR/ATEX-2380-6T	965		16.40	9.47	7.50	29900	73	363	441

1. The noise level values are pressures in dB(A) measured at a distance of 3 metres in a free field.

Acoustic characteristics

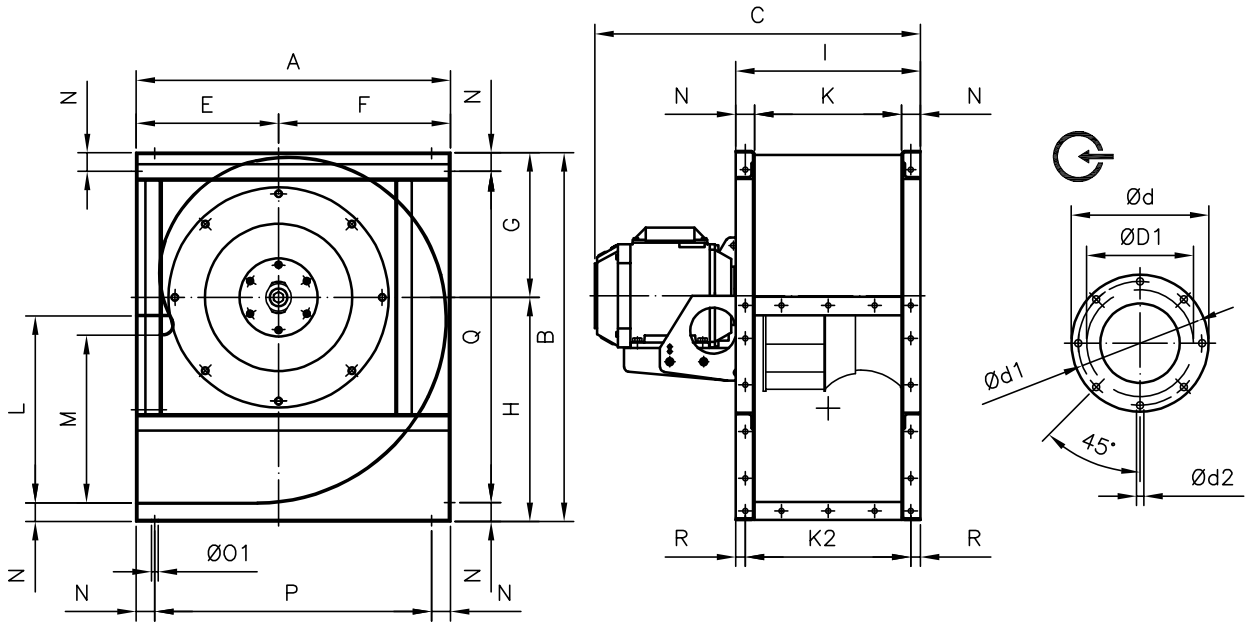
The values given are obtained under laboratory conditions according to ISO 3744.
Sound power spectrum Lw(A) in dB(A) per Hz frequency band
Values measured at inlet with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
CMR/ATEX-1240-4T	56	70	76	79	79	80	70	59
CMR/ATEX-1445-2T	73	85	83	95	93	97	99	89
CMR/ATEX-1445-4T	59	72	78	83	80	83	78	64
CMR/ATEX-1650-2T	73	81	85	99	97	99	99	88
CMR/ATEX-1650-4T	64	74	82	84	83	85	76	66
CMR/ATEX-1856-4T	69	78	91	87	90	91	85	71

	63	125	250	500	1000	2000	4000	8000
CMR/ATEX-2063-4T	80	85	91	93	91	88	81	73
CMR/ATEX-2063-6T	69	70	82	82	81	83	73	63
CMR/ATEX-2271-4T	83	84	93	96	98	99	95	82
CMR/ATEX-2271-6T	73	73	87	86	90	90	79	68
CMR/ATEX-2380-4T	76	78	94	91	96	97	93	82
CMR/ATEX-2380-6T	68	70	86	83	88	89	85	74

Dimensions mm

CMR/ATEX-1240…2271

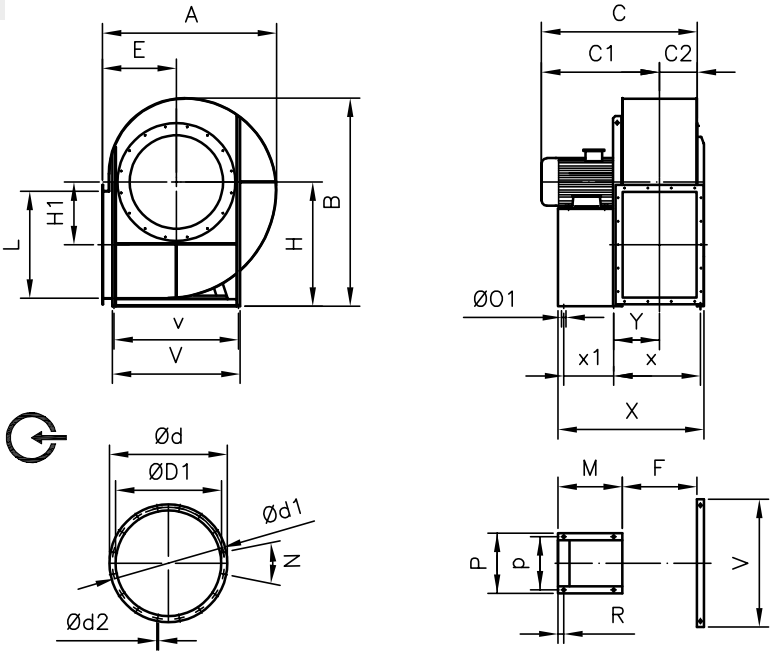


	A	B	C Ex eb	C Ex db	ØD1*	Ød	Ød1	Ød2	E	F	G	H	I	K	K2	L	M	N	ØO1	P	Q	R
CMR/ATEX-1240-4T	673	790	596	638	400	472	444	M8	305	368	310	480	395	315	355	400	358	40	11	593	710	20
CMR/ATEX-1445-2T	765	880	774	857	450	522	494	M10	350	415	339	541	445	355	405	450	404	45	11	675	790	20
CMR/ATEX-1445-4T	765	880	679	687	450	522	494	M10	350	415	339	541	445	355	405	450	404	45	11	675	790	20
CMR/ATEX-1650-2T	832	970	945.5	1018	500	582	555	M10	375	457	378	592	490	400	450	500	445	45	13	742	880	20
CMR/ATEX-1650-4T	832	970	724.5	724.5	500	582	555	M10	375	457	378	592	490	400	450	500	445	45	13	742	880	20
CMR/ATEX-1856-4T	925	1084	798	889	560	645	615	M10	415	510	426	658	550	450	500	560	493	50	13	825	984	25
CMR/ATEX-2063-4T	1037	1218	937	1020	630	720	688	M10	465	572	477	741	620	500	560	630	530	60	13	917	1098	30
CMR/ATEX-2063-6T	1037	1218	839	930	630	720	688	M10	465	572	477	741	620	500	560	630	530	60	13	917	1098	30
CMR/ATEX-2271-4T	1173	1375	1129	1201	710	800	768	M10	525	648	538	837	690	560	625	710	603	65	13	1043	1245	32.5
CMR/ATEX-2271-6T	1173	1375	973	1056	710	800	768	M10	525	648	538	837	690	560	625	710	603	65	13	1043	1245	32.5

* Recommended nominal tube diameter

Dimensions mm

CMR/ATEX-2380

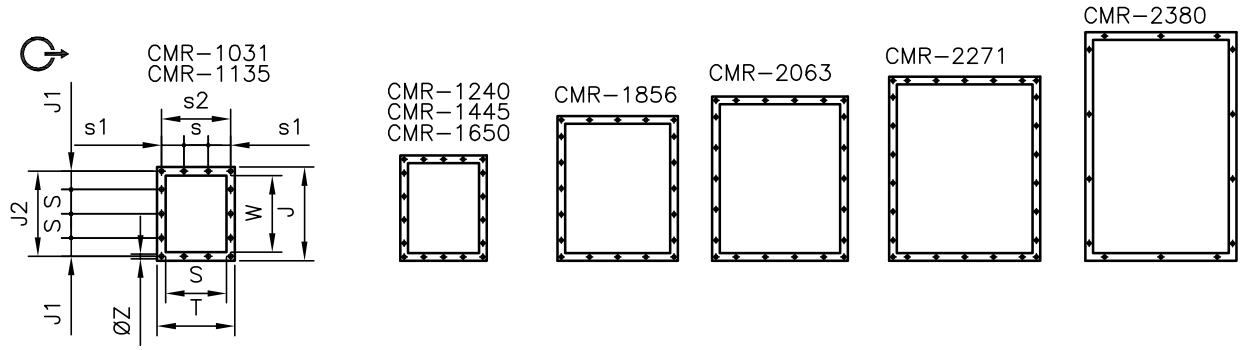


			Ex eb		Ex db											
	A	**B**	**C**	**C1**	**C**	**C1**	**C2**	**ØD1***	**Ød**	**Ød1**	**Ød2**	**E**	**F**	**H**	**H1**	**L**
CMR/ATEX-2380-4T	1312	1592	1265	973	1129	837	292	805	920	861	15	560	574	950	482	801
CMR/ATEX-2380-6T	1312	1592	1110	818	1157	865	292	805	920	861	15	560	574	950	482	801

	M	**N**	**ØO1**	**P**	**p**	**R**	**V**	**v**	**X**	**x**	**x1**	**Y**
CMR/ATEX-2380-4T	543	16x22°30'	19	926	862	39	965	862	1184	675	441	353
CMR/ATEX-2380-6T	474	16x22°30'	19	926	862	39	965	862	1115	675	372	353

* Recommended nominal tube diameter

Outlet nozzle

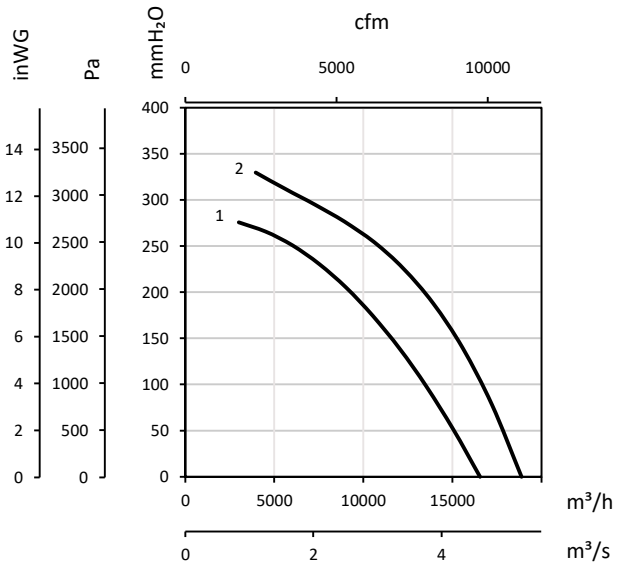


	T	**J**	**J1**	**J2**	**S**	**s**	**s1**	**s2**	**W**	**Øz**
CMR/ATEX-1240	395	480	70	440	315	100	77.5	355	400	11
CMR/ATEX-1445	445	540	99	498	355	100	102.5	405	450	11
CMR/ATEX-1650	490	590	88	550	400	125	100	450	500	13
CMR/ATEX-1856	550	660	55	610	450	125	125	500	560	13
CMR/ATEX-2063	620	750	95	690	500	125	92.5	560	630	13
CMR/ATEX-2271	690	840	75	775	560	125	62.5	625	710	13
CMR/ATEX-2380	689	921	135.5	871	569	200	119.5	639	801	14

Characteristic curves

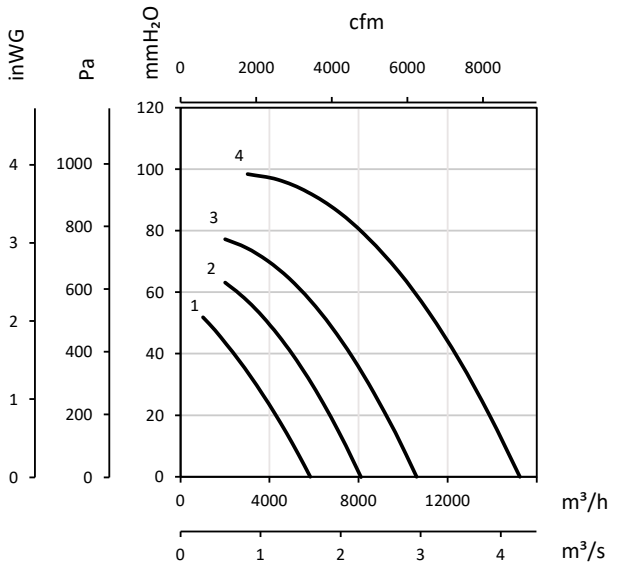
Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

2T=3000 r/min



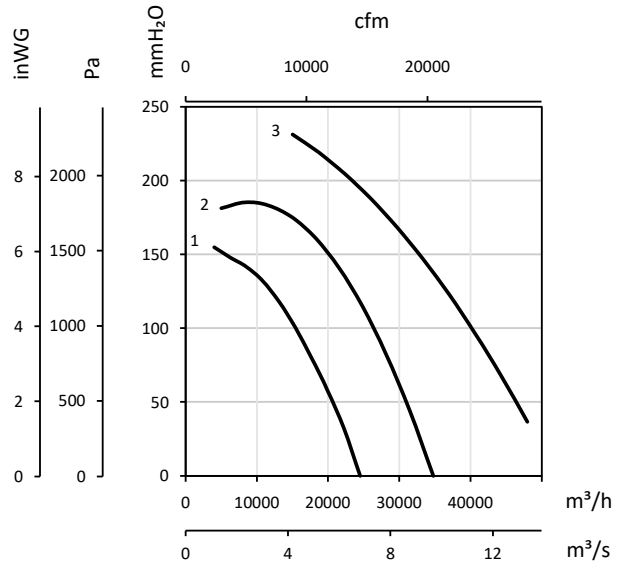
1 : CMR/ATEX-1445-2T
2 : CMR/ATEX-1650-2T

4T=1500 r/min



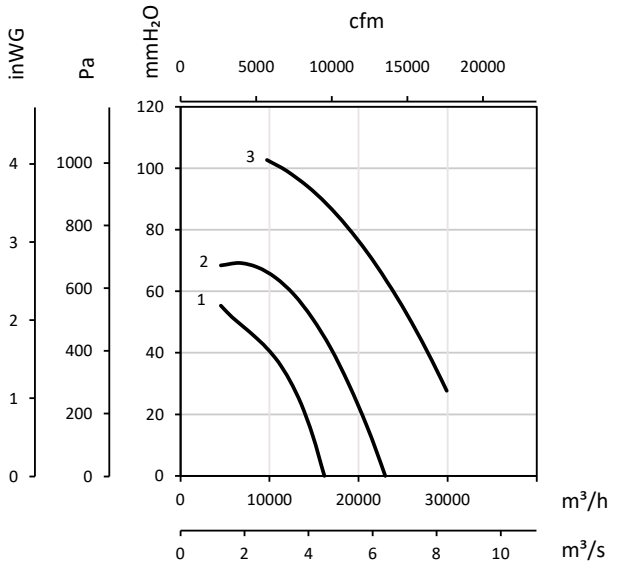
1 : CMR/ATEX-1240-4T
2 : CMR/ATEX-1445-4T
3 : CMR/ATEX-1650-4T
4 : CMR/ATEX-1856-4T

4T=1500 r/min



1 : CMR/ATEX-2063-4T
2 : CMR/ATEX-2271-4T
3 : CMR/ATEX-2380-4T

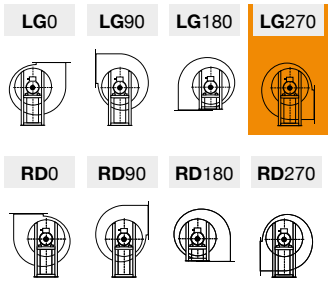
6T=1000 r/min



1 : CMR/ATEX-2063-6T
2 : CMR/ATEX-2271-6T
3 : CMR/ATEX-2380-6T

Orientations

Standard supply LG 270



Accessories

INT/ATEX | RPA | B | BD | BIC | ACE/ATEX | REG | S